Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

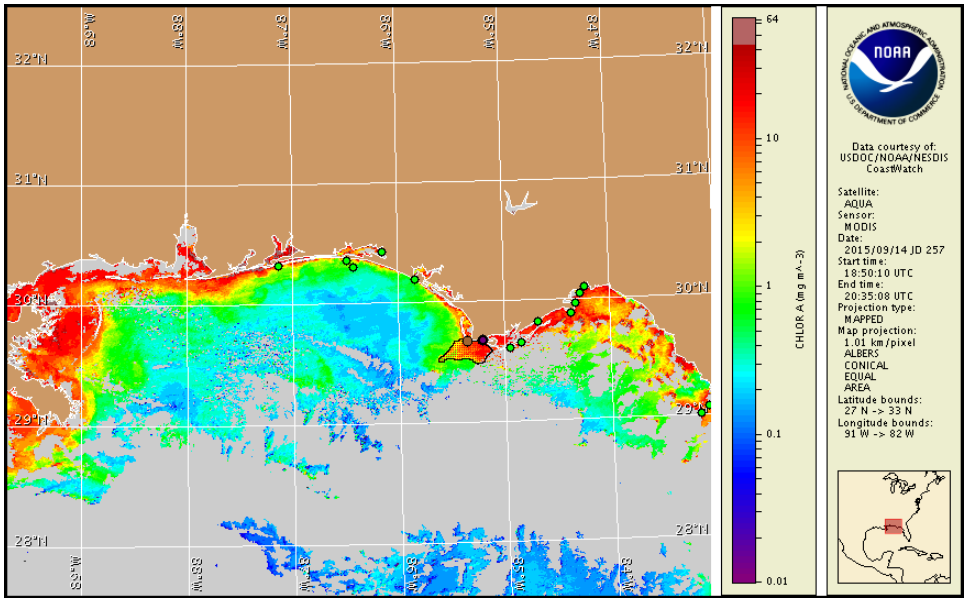
Thursday, 17 September 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, September 15, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 7 to 16: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Not present to low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest Florida from Escambia to Taylor counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore northwest Florida Thursday, September 17 to Monday, September 21 is listed below:

County Region: Forecast (Duration)
Gulf: Very low (Th-M)
Franklin, bay regions: Low (Th-Sa)
All Other NWFL County Regions: None expected (Th-M)
SWFL County Regions: Visit http://tidesandcurrents.noaa.gov/hab/#swfl

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. No reports of respiratory irritation or fish kills have been reported over the past several days.

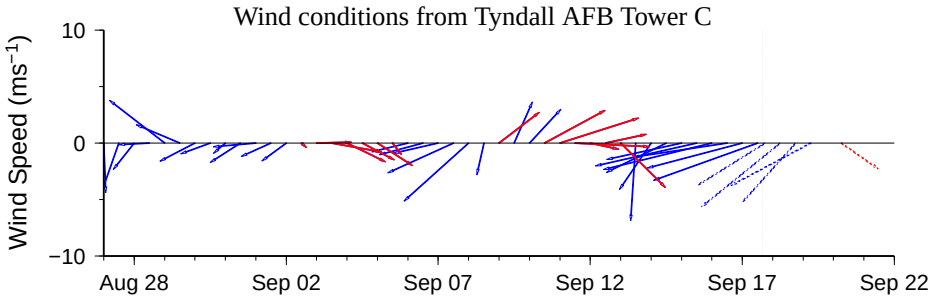
Analysis

Recent samples collected over the past week from along- and offshore northwest Florida (Escambia to Taylor counties) indicated not present to 'very low a' concentrations of *Karenia brevis*. In Gulf County, samples collected on 9/14 from the Indian Pass boat ramp, indicated *K. brevis* concentrations decreased to 'very low a' where sampling from the previous week indicated 'low a' *K. brevis* concentrations (FWRI). In Franklin County, additional sampling from Apalachicola Bay, at Sikes Cut and Carrabelle Beach, continue to indicate that *K. brevis* is not present. All other sampling along- and offshore and within the bay regions of Escambia, Okaloosa, Bay, and Wakulla counties indicated *K. brevis* was not present (FWRI; 9/14-9/15). No reports of respiratory irritation or dead fish have been received from alongshore northwest Florida over the past several days (FWRI, MML; 9/15-9/17).

Ensemble imagery of northwest Florida has been obscured by clouds since the previous bulletin on 9/15, preventing analysis. In ensemble imagery from 9/14 (MODIS Aqua, shown left), patches of elevated to very high chlorophyll (2 to >20 μg/L) with the optical characteristics of *K. brevis* are visible along- and offshore northwest Florida from Escambia to Gulf counties. A patch of anomalously high chlorophyll (7 to >20 μg/L) is visible alongshore, and extending up to 12 miles offshore, Gulf County where recent sampling indicated up to 'low a' concentrations of *K. brevis*. Further sampling of this region is recommended.

Northeast to north winds forecasted today through Sunday may promote westerly transport of *K. brevis* concentrations and may minimize the potential for intensification at the coast.

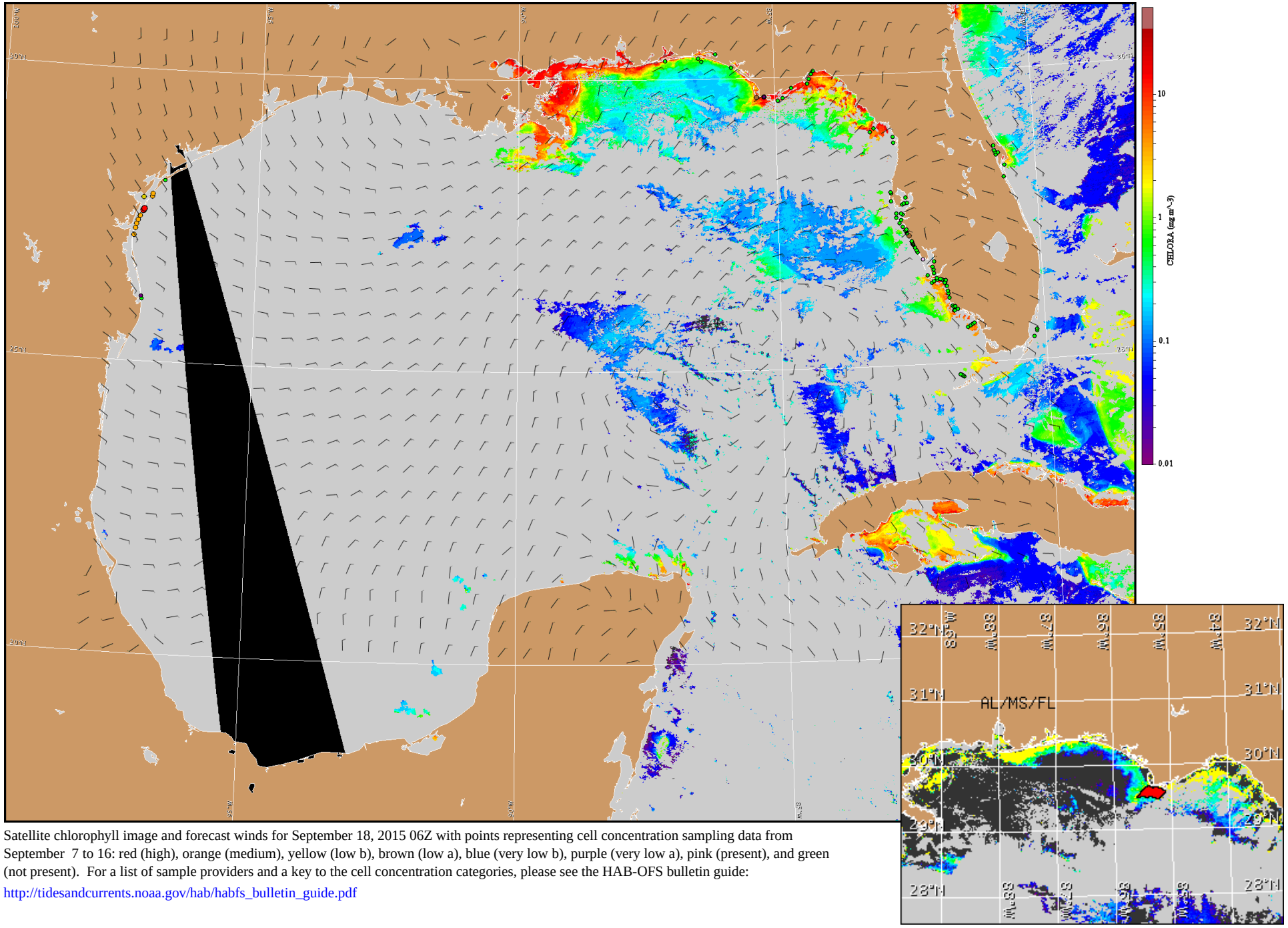
Davis, Lalime



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Escambia to Taylor counties: Northeast winds (10-20kn, 5-10m/s) today through Saturday. North winds (5-10kn, 3-5m/s) Saturday night through Sunday becoming west winds (5-10kn) in the afternoon. Variable winds (5kn, 3m/s) Monday becoming south winds in the afternoon.



Satellite chlorophyll image and forecast winds for September 18, 2015 06Z with points representing cell concentration sampling data from September 7 to 16: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).